

# Aerospace conference: growth, training, and employment opportunities

by Heidi Riley

The **Atlantic Canada Aerospace & Defence Association (ACADA)** hosted this summer the 2019 Sea to Sky: PEI Aerospace, Defence and Marine Conference. This year's theme was *Shaping your success through learning & development*. Presentations from industry, education, and government representatives focused on workforce development, skills needs, and growth.

"There is a skills shortage in the aerospace industry, and we are not producing nearly enough qualified people to meet the demand," says **Mike Doiron**, Regional Representative, Canadian Council for Aviation and Aerospace (CCAA). "CCAA's Labour Market report (2018) predicts a shortage of 55,000 workers in our industry by 2025.

"Boeing also recently forecasted the world-wide need for 804,000 pilots and 790,000 maintenance workers within the next 20 years. The forecast has grown by 61 percent over the last five years, so the problem is accelerating."

CCAA supports aviation and aerospace companies across Canada with labour market issues. They supply industry with training, wage subsidies, a National Labour Market Strategy, as well as helping current employees become certified and qualified. They also focus on the future workforce, providing labour market intelligence.

"We have worked for many years on occupational standards, which are detailed skills and knowledge assessments of jobs within the aviation and aerospace sector. This year, among other things, we are working on projects to increase the participation of women and Indigenous peoples, both of which are underrepresented."

CCAA provides an opportunity for employers to post jobs and connect with people looking for work in the aviation and aerospace industry. They also administer a student work placement program which provides wage subsidies to hire students.

For more information about the **Canadian Council for Aviation and Aerospace**, visit [www.avaerocouncil.ca](http://www.avaerocouncil.ca)

"There is a huge depth of innovation happening in the Atlantic Canada aerospace and defence and marine sector, which is defined by new cutting edge products and technologies which are critical to the economy of the region," says **Chris LeClair**, Policy Intel Inc., PEI.

"This sector provides full-time year-round employment. The industry pays well, and it is innovation-driven and technology oriented. Over 10,000 people are employed in this sector. It is a major player in terms of export growth, and it is an economic success story.

"The biggest challenge facing the sector in Atlantic Canada is HR and labour market issues.

"From a study done in 2018 it indicated aerospace manufacturing has an older workforce than the Canadian average, and the demand for employees is outstripping supply by three to one," says Chris.

*"The 2018 study reported that aerospace companies were finding most difficulty recruiting staff for engineering and trades, production and assembly, and information technology."*

"The study is a call to action and an effort to understand supply and demand issues facing this sector in terms of the labour market, so that we can attract more entrants," says Chris. "We need to understand wages and benefits, vacancy rates, supply of new entrants into training institutions, and cost of living in Atlantic Canada.

"There are plans for a region-wide promotion campaign to attract students to careers in the sector and the education needed to become qualified for those careers.

"Skills shortages are the biggest issue in Atlantic Canada," says **Francis McGuire**, President, Atlantic Canada Opportunities Agency. He pointed to data from The Bank of Canada, Atlantic Provinces Economic Council, and other agencies to explain those shortages.

"There are 38,000 fewer people in the labour market today than in 2012. Between 2020 and 2030, 228,000 people are eligible to retire at 65. That is 20 percent of the total labour force. So the problem is just starting. This is absolutely scary."

"A third of the jobs can be eliminated by automation and advanced manufacturing, and a third can be filled by immigration. A large percentage of students at Eastern Canada schools are foreign. Local companies need to make these people and their families feel comfortable and welcome, or they won't stay.

"The other third needs to involve four demographic groups: those 55 and older, those between 15 and 25, the Indigenous community, and women. Also, access to extended-hour daycare needs to be provided."

**Industrial engineering** is not a well-known career path but an evolving career. "We look at processes and systems and how to make them better, which can save companies thousands of dollars in products and time," says **Sandra MacAulay Thompson**.

"We study processes, products and systems in manufacturing, healthcare, logistics and transportation, supply chain, finance, telecommunications, and Human Resources. Our goal is to find ways to improve these systems by looking at productivity, efficiency, and quality.

"The skills needed in this discipline include communication, data collection and analysis, problem definition and problem solving, and project management skills.

"These skills can be transferred to facilities design, engineering economics, quality control, maintenance, statistics and data mining, supply chain management, inventory systems, organizational behaviour, and many more areas of work."

"Three industrial engineers work at StandardAero in Summerside: one is a full-time position as a Continuous Improvement Engineer, one in Supply Chain, and one in a contract position," says **Sharon Ross**.



From right, Sandra MacAulay Thompson, Engineer-in-Residence, Department of Industrial Engineering, Dalhousie University, and Sharon Ross, Director of Continuous Improvement, StandardAero.

"In the last two years, we have used our industrial engineers heavily to do data analysis and help with functional specifications for any type of software improvements.

"We start with lots of process mapping, understanding our problem, and a lot of data analysis, and then work with teams to help them solve complex problems.

"Industrial Engineers are very effective in terms of quality and efficiency. I feel the profession is generally not well understood and quite undervalued, so I promote it all that I can.

"They can add value to any industry, and any size organization. I am a huge fan of their skill set, and I would definitely hire more, given the opportunity."

Industrial engineering programs are offered at Ecole Polytechnic in Montreal, the University of Toronto, and Dalhousie University. For more information, visit [dal.ca/engineering/capstone](http://dal.ca/engineering/capstone) and [www.dal.ca/faculty/engineering/industrial.html](http://www.dal.ca/faculty/engineering/industrial.html)



## Tronos Jet Maintenance moves into additive manufacturing

Founded in 2001, Tronos is an aircraft leasing, major modification centre and aircraft maintenance services provider. They have owned or managed a fleet of approximately 60 BAe 146 aircraft, as well as engines and spare parts.

"We have recently placed aircraft in Australia, Indonesia, the Philippines, and South America," says **Mark Coffin**. "Our employment numbers vary, but right now we employ 25 permanent staff and sometimes we float up to 40 with temporary contractors."

They are an EASA and Transport Canada approved Aircraft Maintenance organization located at Slemon Park. The Tronos Manufacturing machine shop opened in 2016 in the Charlottetown Airport Business Park. They use CAD software to design and manufacture machined components.

"The machine shop focuses on additive manufacturing of aerospace components. Additive manufacturing is the process of joining material together to make components.

"Canada is behind the rest of the world in additive manufacturing, which means there is space to play. As a country and a region, we need more uptake with this technology.

"We are working with laser-powderbed fusion technology to manufacture aerospace components. We currently have two laser-powderbed machines and will be getting another one in October for running our aerospace component program.



Mark Coffin, CEO, Tronos Canada Inc.

"In five to 10 years, this technology will be moving at such a rate, that if you are not in it now, you are way behind. This technology is ideal for this region, because you don't need to ship large amounts of material.

"We have in-house design capabilities, and are in the process of setting up a metallurgical lab. A PhD of Metallurgy is on staff to deal with the microscopic level of the manufacturing process. The company has invested \$4 million into the shop in Charlottetown."

For more information, visit [www.tronosjet.com](http://www.tronosjet.com)



For more about **ACOA**, visit [www.acoa-apeca.gc.ca](http://www.acoa-apeca.gc.ca)

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Ken Lecky, Training & Development Manager, and Terri Anderson, Learning & Development Specialist, StandardAero.

**StandardAero** is the largest aerospace company on PEI and operates out of Slemon Park, employing just under 500 full-time positions. The PEI location supports the training needs of an additional 225 employees at eight StandardAero locations around the world.

"Training employees allows their voices to be heard, their competency to go up, and it gives them the tools to succeed," says **Ken Lecky**.

"It also leads to good succession planning so that roles can be filled in the future. Personal development, cross-training, and continuous improvement are vitally important to build capacity and move forward.

"In 2012, our Continuous Improvement Director formed a team with complimenting skillsets.

"Members from Training, Quality, Engineering and CI were assembled to develop and take on larger projects.

"We were personally developed and with a Lean methodology, we were doing very specific training and became subject matter experts on a number of processes and tools.

"That same year we also launched an electronic database to house technical records and then added the training requirements for employees in both technical and support areas.

"We empowered our senior employees as mentors, to sign off on the capabilities of our staff, which can be easily generated into a report, so gaps are identified and succession plans are created.

"In 2013 we formed a training committee comprising of Senior Management and discussed the training needs of departments, and strategic direction of the training program for the business," says **Terri Anderson**. "This put focus on professional development and leadership skills.

"We coached and mentored some employees as Training Associates," says Ken. "These employees deliver internal training that matches their skillsets and they are the "go to" people to learn from.

"About 60 percent of our employees are capable to work on all three different engine lines. The others will get there eventually," says Ken.

"We are improving at getting the right people the right training at the right time by building a training plan for each employee and filling it through mentorship, classroom sessions, lunch talks, external courses, and case studies, and more.

"As a result, workforce flexibility has improved. If you need to make efficiencies, start by looking within your own system first and eliminate waste to gain capacity for more work. You can build a flexible workforce and a stronger team through mentorship.

PEI is now the turboprop airline and fleet centre of excellence and has absorbed the PW100 and PT6A engine lines from the Winnipeg shop to allow them to take on additional business.

For more information about **StandardAero**, visit [www.standardaero.com/AboutUs/ContactUs/FacilityLocations/SummersidePE.aspx](http://www.standardaero.com/AboutUs/ContactUs/FacilityLocations/SummersidePE.aspx)

For more information about the **PEI Aerospace and Defence industry**, contact **Allan Campbell**, Provincial Director PEI, **Atlantic Canada Aerospace & Defence Association**, at 902-314-3946 or email [allan@ac-ada.ca](mailto:allan@ac-ada.ca)



## Building the capacity of the film and TV industry on PEI

by Stacy Dunn

**F**ilmPEI is a PEI film-focused cultural hub offering space, equipment and resources to local and visiting filmmakers and productions. Presently, three staff members offer support and encouragement to filmmakers at all levels to inspire excellence in film, video, and new media projects.

The **Film 4Ward** program is administered by FilmPEI and is a funding source incubator for film production and skill capacity building for both emerging and mid-career filmmakers. **Renee Laprise**, FilmPEI Executive Director, says this funding lifts producers and directors to the next level of their creative careers.

A highlight of the 2019 Charlottetown Film Festival being held October 25 to 27 will be the opening night's showcase of four short films that were supported through Film 4Ward.

"We are extremely excited to share the Film 4Ward films with the world," says Renee. "All the teams delivered films of high production value and quality storytelling."

### The first group of short films supported through Film 4Ward

**Hot or Not** - Ryan McCarvill, Director, and Matt Sherman, Producer

**SunnySide** - Jenna MacMillan, Director, and Bryde MacLean, Producer

**Solastalgia** - Millefiore Clarkes, Director, and Emma Fugate, Producer

**Furball** - Jason Rogerson, Director, and Harmony Wagner, Producer

*Furball* is about a self-centered cat who doesn't like that his owner Norman is giving him less attention when the possibility of a new relationship enters Norman's life. The short film comedy premiered at FIN Atlantic International Film Festival in Halifax on September 15. In November, *Furball* will have its American premiere at the Cat Film Festival in New York City.

"Festivals are a great place to showcase what PEI filmmakers can do and to network with others," says writer and director **Jason Rogerson**. "It can be challenging to break out of a region, so it's great the Cat Film Festival has a touring program which will feature *Furball* in over 50 cities all over Canada and United States in 2020. It's exciting and gratifying. Everyone did a terrific job."

Jason got his start in the film and TV industry on PEI 20 years ago. He started with creating videos for stage productions, including *Sketch-22*, and worked at Moses Media in Charlottetown doing TV commercials, training videos, and other corporate work.

He co-owns Periscope Pictures with Harmony Wagner, doing both creative and corporate work. In 2015, they produced *Kooperman*, Periscope's first feature film, which received funding from Telefilm Canada.

"From pre-production to filming and post-production, up to 80 cast and crew worked on that movie. We were able to pay them a fair wage, which felt good."

### Mentorship

One of the mandates of Film 4Ward is to mentor crew members. This support is crucial to help filmmakers up their game.



Jason Rogerson graduated with a Bachelor of Fine Arts in Film and Video at York University in Toronto and has been in the film and TV industry for over x20 years. The Film 4Ward xprogram gave him and producer Harmony Wagner the support they needed for their latest production.

"Mentorship is a great way to support people in this industry so they can further develop their craft," says Jason. "I enjoy mentoring others in the film and TV industry. Training Islanders in key positions is a win-win."

### Applying to the Film 4Ward program

Film4Ward 2019/2020 is currently seeking submissions. Deadline to apply is November 18, 2019.

Visit [www.filmpei.com/programs/film-4ward-program](http://www.filmpei.com/programs/film-4ward-program) for submission guidelines and the application form.

For details about the first four short films funded through the Film 4Ward program, visit [www.filmpei.com/film-4ward-films-debut-at-fin-2019](http://www.filmpei.com/film-4ward-films-debut-at-fin-2019)

For more information on **FilmPEI**, visit [www.filmpei.com](http://www.filmpei.com)

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